TRAFFIC ENGINEERING DIVISION

MARICOPA COUNTY DEPARTMENT OF TRANSPORTATION

Policy/Procedure Guideline

SECTION 3: Traffic and Safety Studies

SUBJECT 3.1: Accident Recording and Reporting Process

EFFECTIVE DATE: 4/10/92

PARAGRAPH: 1. Purpose
2. Description
3. Exhibits
4. Background
5. Authorization
6. References
7. Attachments

1. PURPOSE:

To maintain a current accident recording, reporting, and analysis system of accident records on County roads.

2. DESCRIPTION:

The procedures for the processing of receiving, recording, and utilizing traffic accident information.

a. Receiving accident reports - The process begins with picking up the weekly batch of accident reports form the Sheriff's Office. The next step is to make sure the street locations are valid. After xeroxing the set of originals, the reposts are submitted to the Arizona Department of Transportation.

b. Recording accident information - The weekly batch of reports are ready for the carding procedure. Carded information can be defined merely as, "A brief summary of the actual traffic accident report." The accident cards summary includes; date, hour, severity, light condition, weather conditions, road conditions, a diagram of the path the vehicles took, and a short summary of the reasons and causes. The card file also serves as a cross-reference to

the hard copy file and is organized alphabetical by east / west street name.

c. Entering data into the computer program - there are three independent accident computer programs.
   1. Intersection Accidents - (91INTR)

   2. Non-Intersection Accidents - (91NON)

   These two programs are on separate data bases but both require similar information (14 data fields per record) to be entered. These fields are the essentials of the data base, and are utilized to formulate reports.

   3. Intersection Collision Diagram - (CRASH)
   This program plots accidents in various colors with corresponding years.

d. Uses of computer generated accident data -

   1. Intersection monthly reports include:
      a. Alpha listing of 4 or more accidents
      b. Accident rate of 4 or more accidents
      c. Number of accidents, from high to low

   2. Report program-
      Used for both intersection and non-intersection accident programs which generates any combination of the 14 fields recorded.

e. The monthly reports are used to monitor intersections. Maricopa County's typical accident rate is established at 2.50, this is based on the total vehicles entering an intersection. This rate is used for both the intersection and non-intersection programs. When the rate of 2.50 is exceeded, the special studies section is contacted to study and determine if any improvements can be made.

3. EXHIBITS:

a. Accident card summary sheet

b. Sample accident card

c. Accident computer input fields sheets

d. Monthly computer report
@ Alpha listing of 4 or more accidents
@ Number of accidents, from high to low
@ Accident rate of 4 or more accidents

4. BACKGROUND:

It has been mandated by the Federal Government for all states to adopt the Manual on Uniform Traffic Control Device for Streets and Highways. Before installing any traffic controls, per the Manual, it is essential to have a complete accident record section. MCDOT's traffic accident section was organized in 1966 as a separate branch of the Traffic Engineering Division . This was due to the need for accurate detailed traffic accident records as a basis for engineering studies.

5. AUTHORIZATION:

A.R.S. 28-643 requires local authorities to install traffic control devices. A traffic engineering study is necessary for the installation of all traffic control devices, and that requires prior accident history. Therefore MCDOT must maintain a traffic accident records section to satisfy this requirement.

6. REFERENCES:

1989 Transportation Laws of Arizona, Section 28-643. Local traffic-control devices. Page 165.

> 28-643. Local traffic-control devices
> Local authorities in their respective jurisdictions shall place and maintain such traffic-control devices upon highways under their jurisdiction as they deem necessary to indicate and to carry out the provisions of this chapter or local traffic ordinances or to regulate, warn or guide traffic. All traffic-control devices erected shall conform to the state manual and

specifications.

1988 Manual On Uniform Traffic Control Devices For Streets and Highways, Section 1A.3, Responsibility for Traffic Control Devices.

1A-3 Responsibility for Traffic Control Devices

The responsibility for the design, placement, operation and maintenance of traffic control devices rests with the governmental body or official having jurisdiction. In virtually all States traffic control devices placed and maintained by State and local officials are required by statue to conform to a State Manual which shall be in substantial conformance with this Manual. Many Federal agencies have regulations requiring standards in conformance with the Manual for their control device applications.

The Uniform Vehicle Code has the following provision in Section 15-104 for the adoption of a uniform Manual:

"The (State Highway Agency) shall adopt a manual and specification for a uniform system of traffic-control devices consistent with the provisions of this act for use upon highways with this State. Such uniform system shall correlate with and so far as possible conform to the system set forth in the most recent edition of the Manual on Uniform Traffic Control Devices for Street and Highways, and other standards issued or endorsed by the Federal Highway Administrator."

Under authority granted by Congress in 1966, the Secretary of Transportation has decreed that traffic control devices on all streets and highways in each State shall be in substantial conformance with standards issued or endorsed by the Federal Highway Administrator.

7. ATTACHMENTS:

a. Accident card is color coded for each individual year.

Approved: _____

Albert G. Letzkus, P.E.
County Traffic Engineer